



Metropolitan Policy Program
at BROOKINGS

Baseline: Building a 21st Century Workforce for the Houston Region

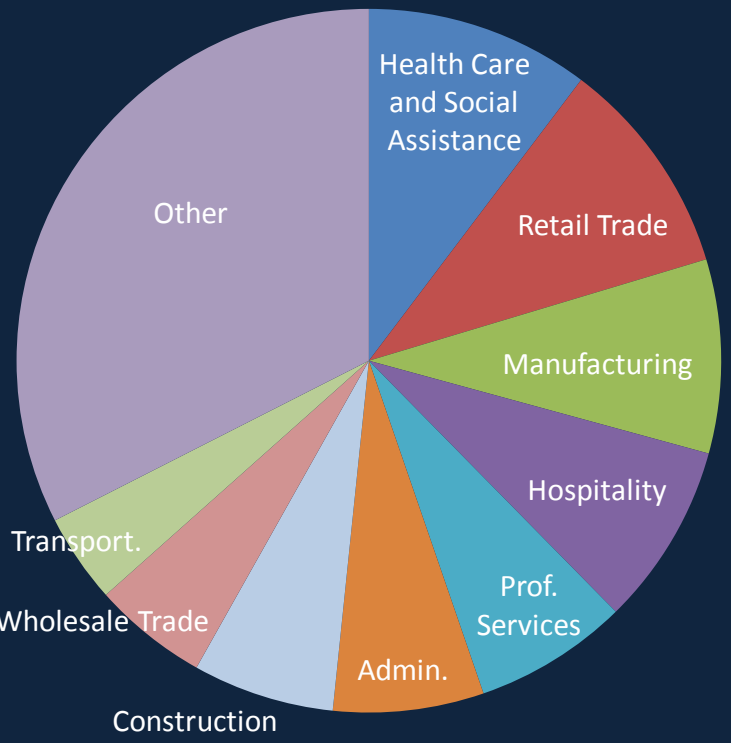
Marek Gootman

Global Cities Initiative - Houston

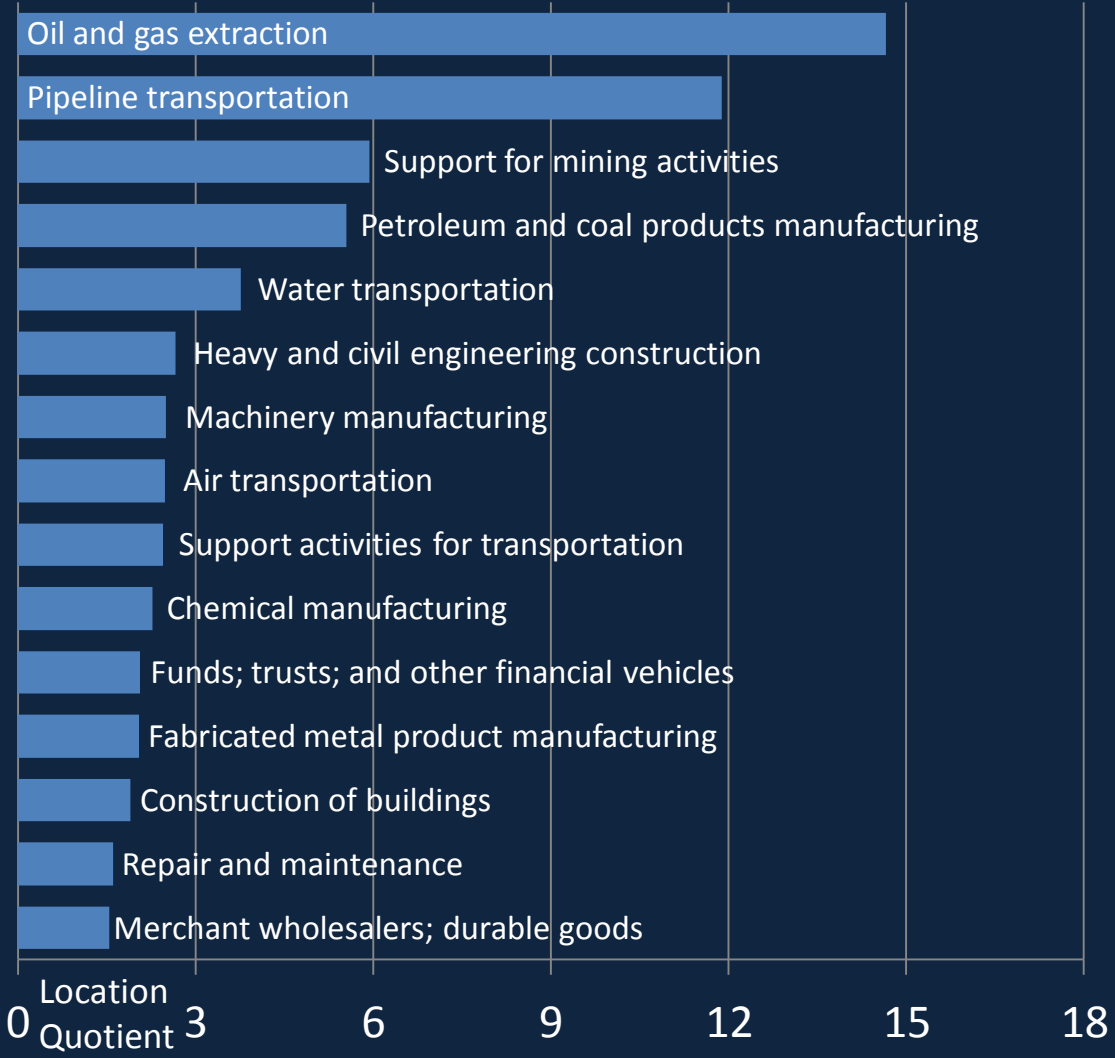
May 14, 2013

Manufacturing, energy, healthcare, transportation are critical components of the Houston economy

Share of Total Employment by Industry Sector, 2012
n=2,734,392



Most Specialized Sub-Sectors by Employment, 2012



Source: Brookings analysis of Moody's Analytics data.

Manufacturing, energy, and healthcare account for 675,000+ jobs, one quarter of Houston's employment base – two in tradable sectors

Manufacturing

190,507

7.0%

Energy

244,484

8.9%

Health Care

243,559

8.9%

Houston is a major exporter – tradable sectors of petrochemicals and machinery manufacturing drive performance

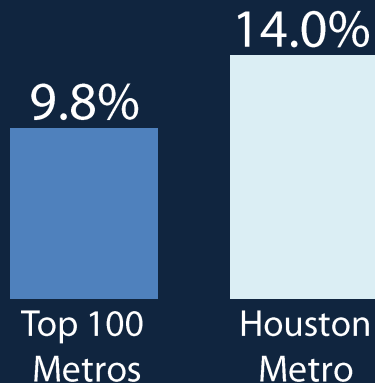
Export Volume

\$47.9 B

Export Jobs

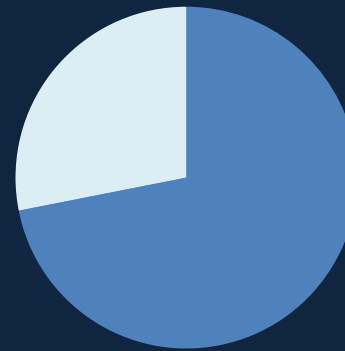
307,000

Export Intensity



Goods & Services Exports

28.1%
services share
of exports



71.9%
goods share
of exports

Top Services Sectors

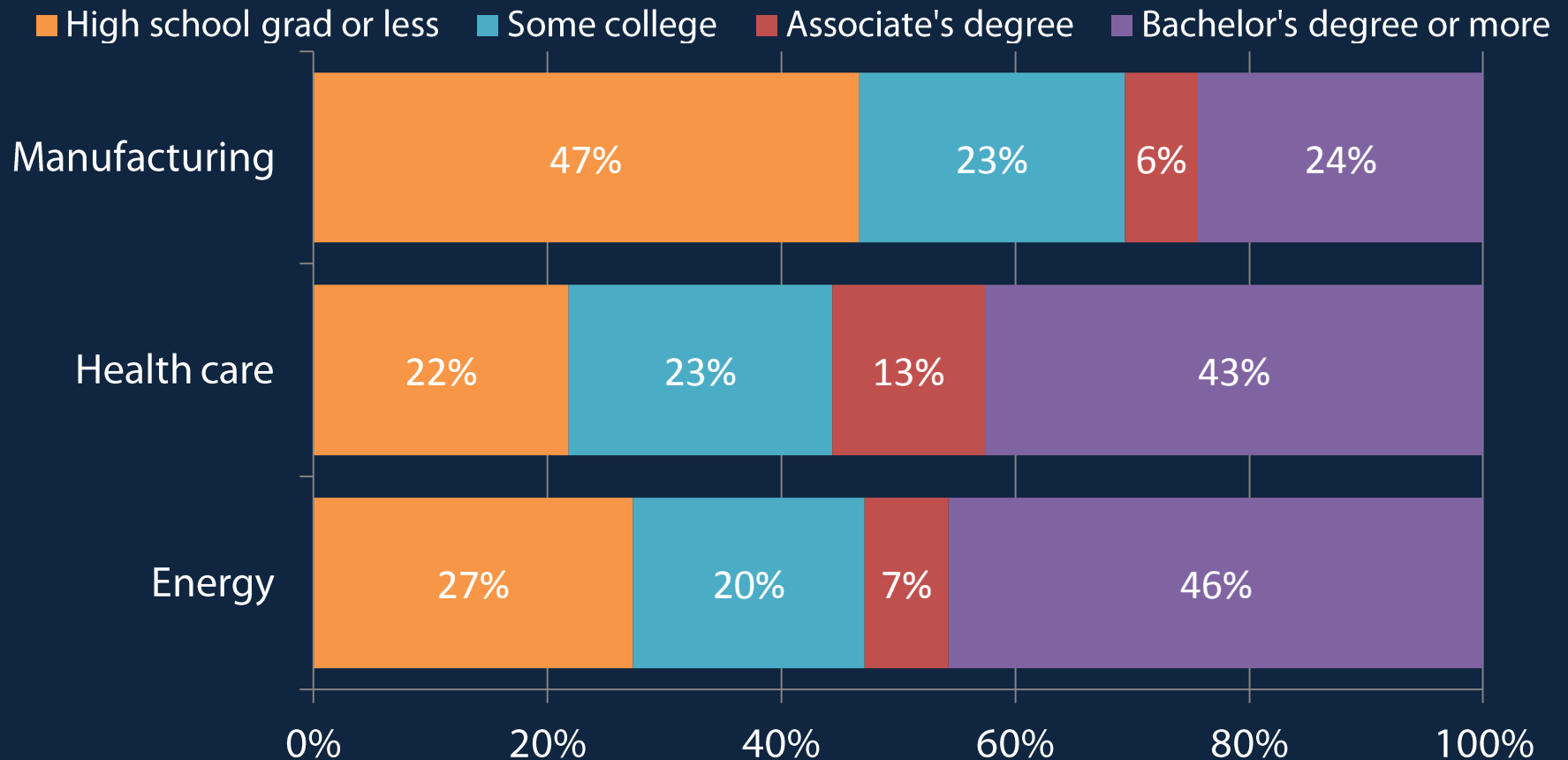
| | |
|--------------------|-------------|
| Travel and Tourism | 8.9% |
| Business Services | 6.9% |
| Royalties | 5.6% |

Top Goods Sectors

| | |
|-----------------------------|--------------|
| Chemicals | 20.3% |
| Machinery Manufacturing | 15.1% |
| Petroleum and Coal Products | 14.9% |

Energy and Health Care workers have high levels of education. Manufacturing skill demands hidden by long-time incumbent workers, and will need more educated replacements.

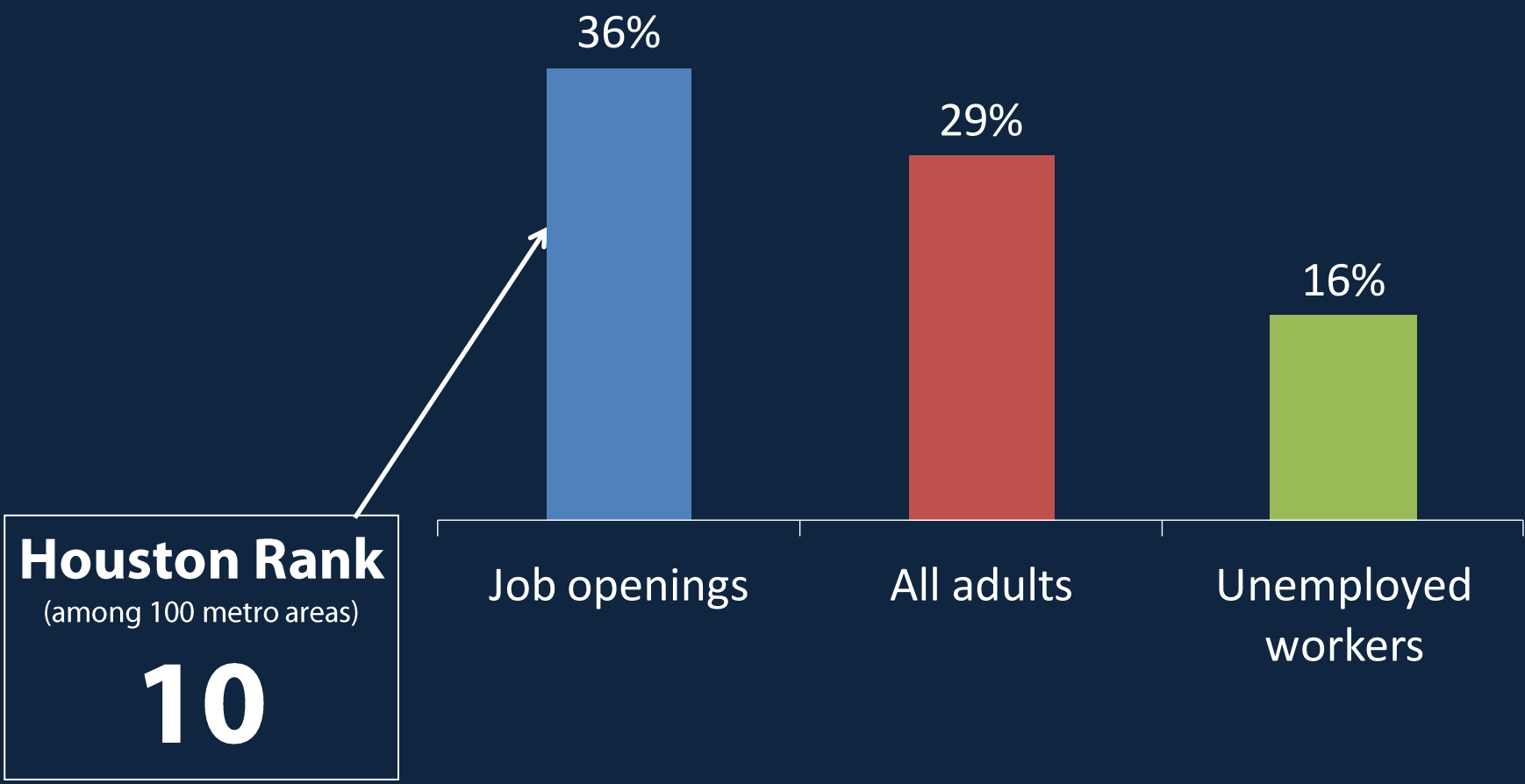
Workers by sector by education attainment, Houston metro, 2011



Source: 2011 ACS 1-year estimates microdata, accessed via IPUMS.org

The Houston region's job openings demand high levels of educational attainment

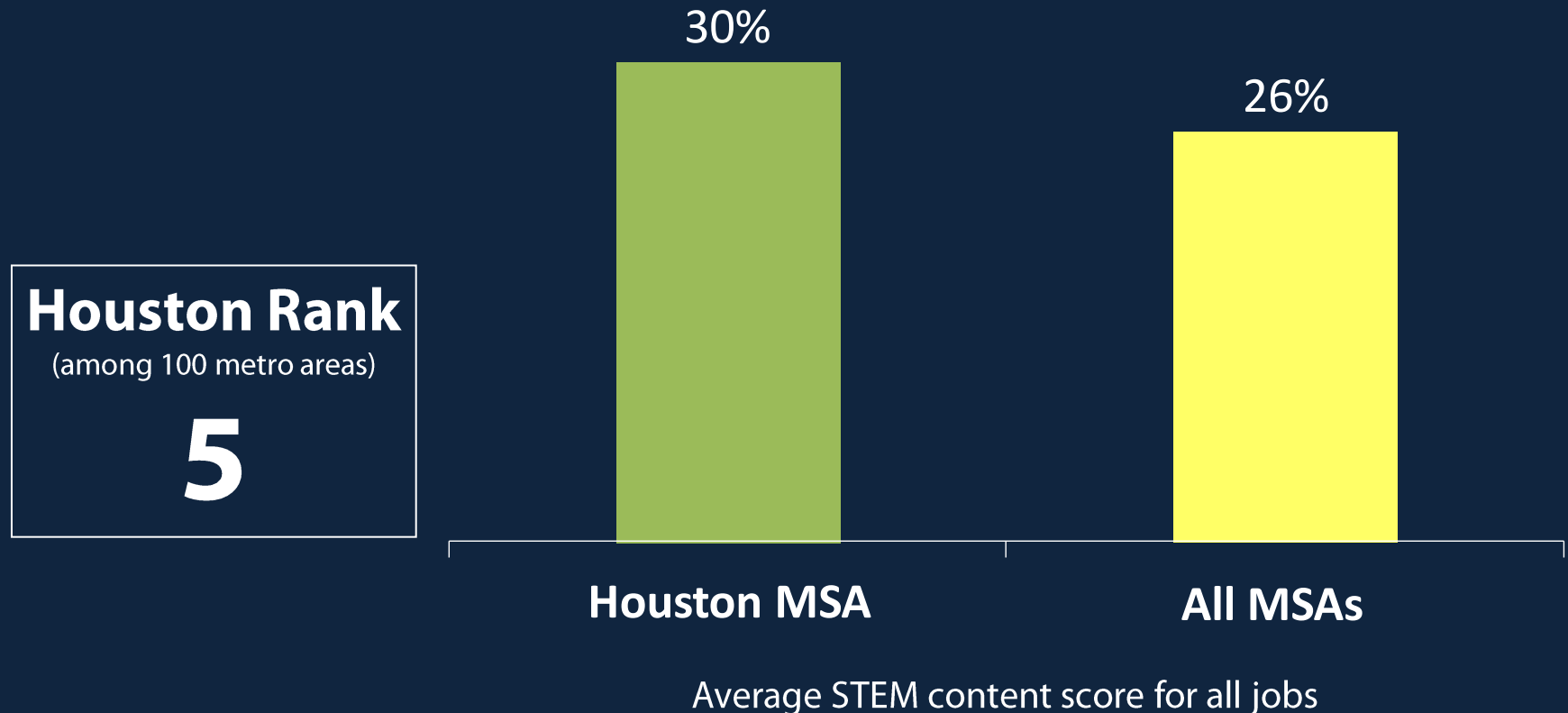
Share of job openings requiring, and adults possessing, bachelor's degree, Houston metro, 2011



Source: Brookings analysis of Help Wanted Online and U.S. Census Bureau data

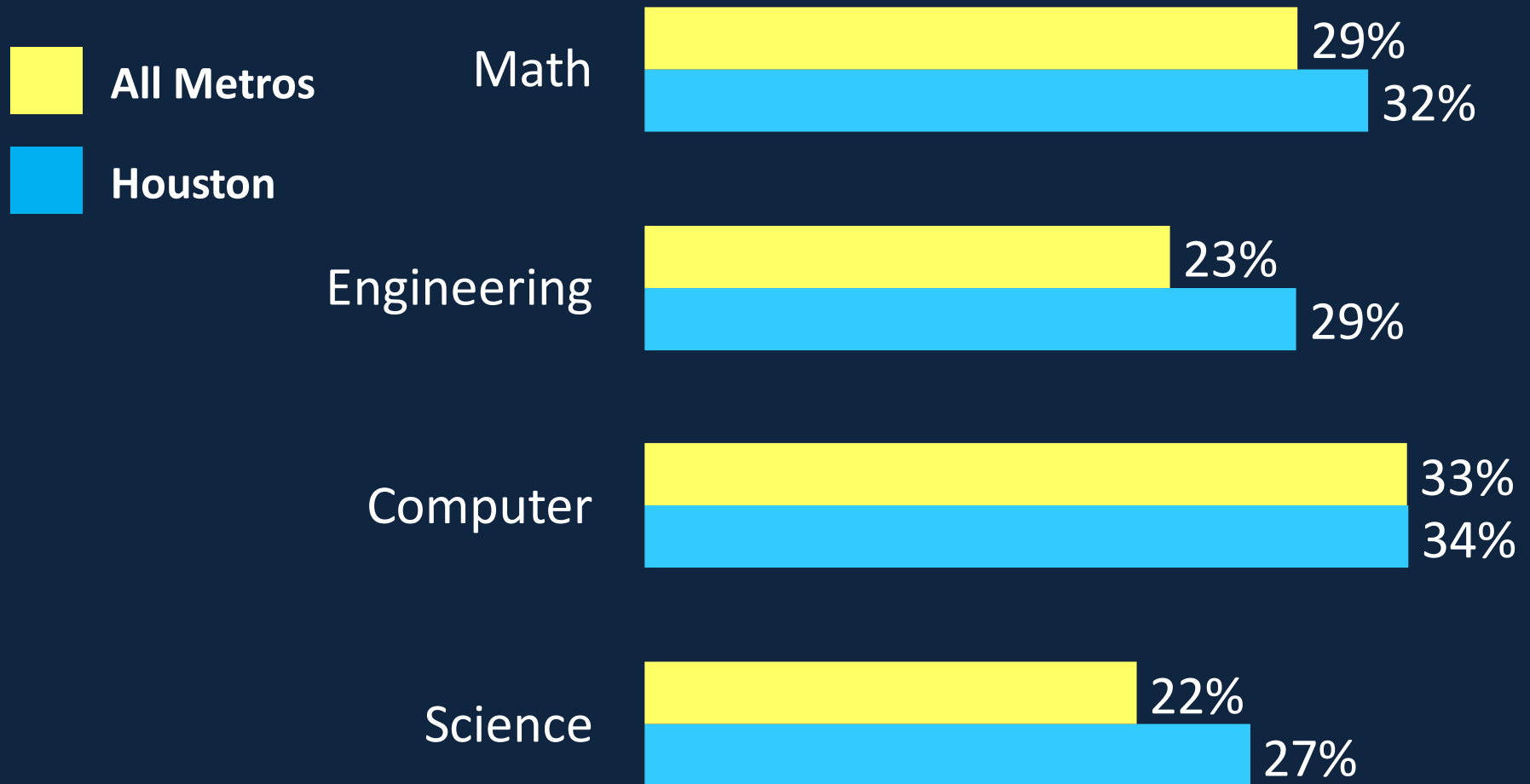
About one third of Houston's jobs are in STEM-focused fields

Share of jobs with above-average STEM content, Houston metro, 2011



Houston's jobs are above-average in every aspect of STEM content

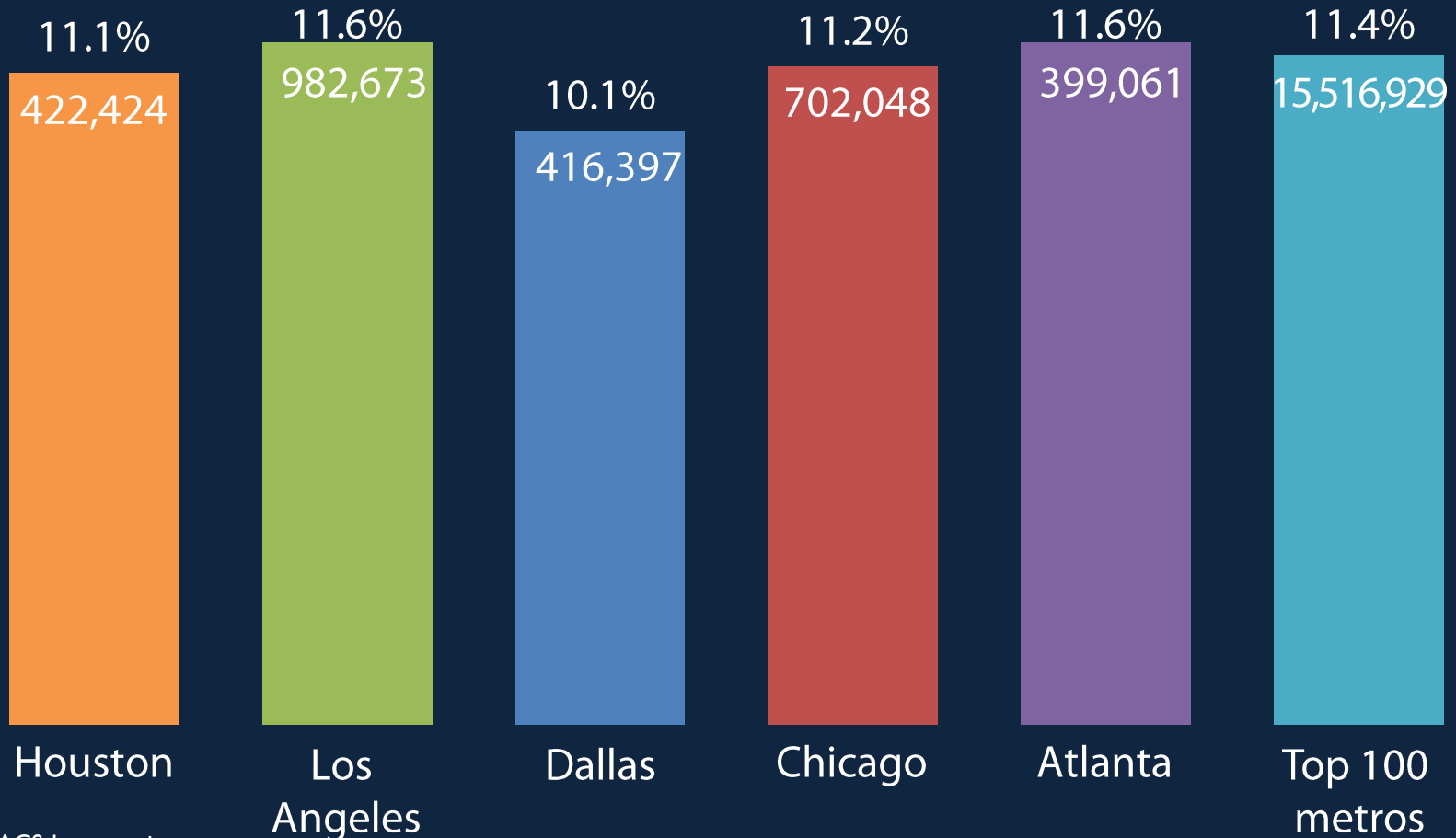
Share of jobs with high science, computer, engineering, or math content, Houston metro, 2011



Houston MSA ranks 5th in population, but 33rd in share of STEM degrees among the top 100 metros

Share of population 25+ with a degree in a STEM field, 2011

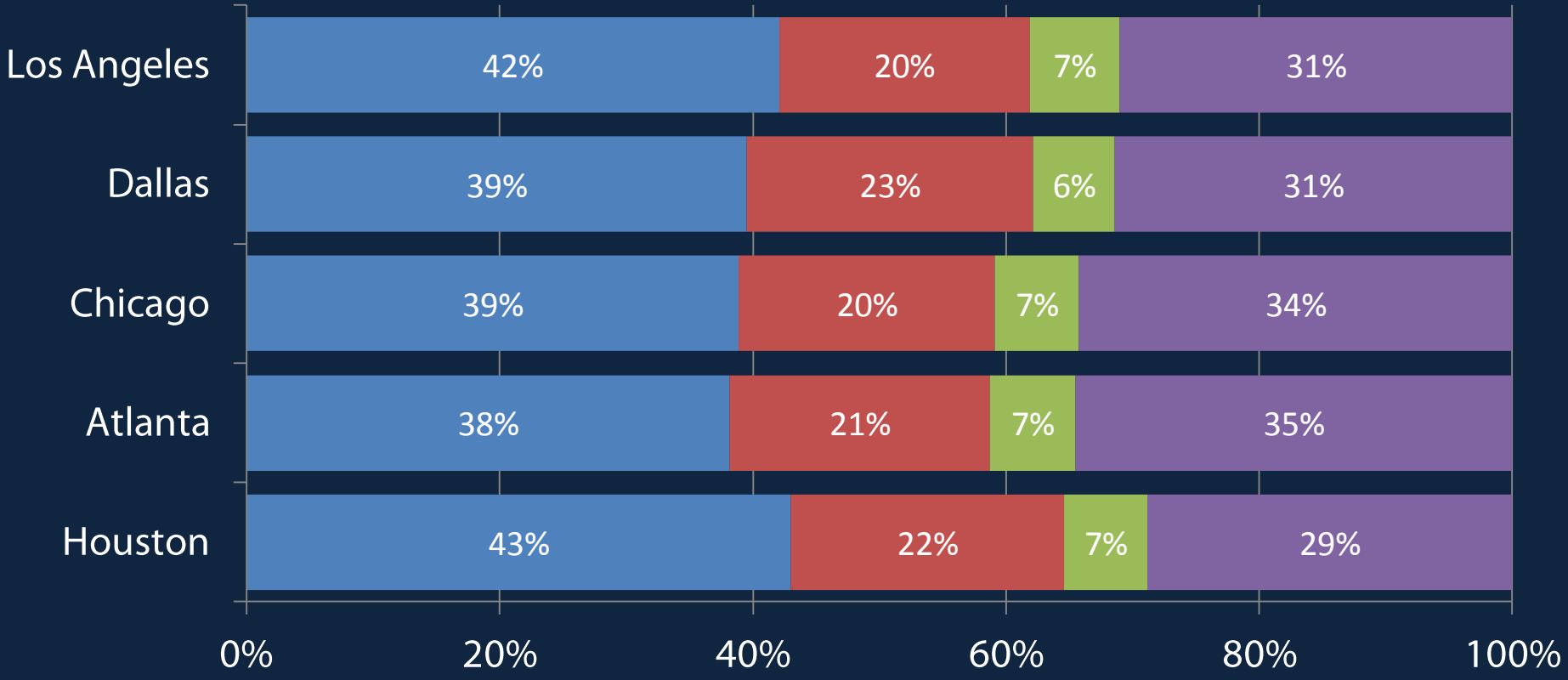
Houston Rank (among 100 metro areas): **33**



Educational attainment in Houston mirrors national trends but is a bit lower than peer metros

Educational attainment for the population 25 and over, 2011

■ High School diploma or less ■ Some college ■ Associate's degree ■ Bachelor's degree or more



Source: 2011 ACS 1-year estimates

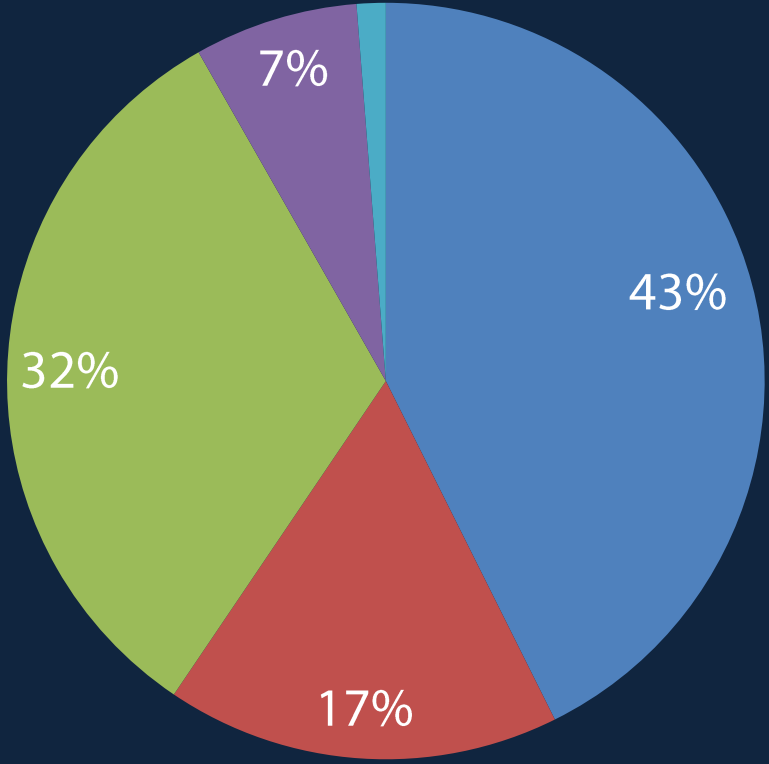
Latinos make up almost 50 percent of youth, compared to 1/3 of adults, indicating a growing presence in the region

Race/Ethnicity by age category, Houston metro, 2011

■ White ■ Black ■ Latino ■ Asian/Pacific Islander ■ Other

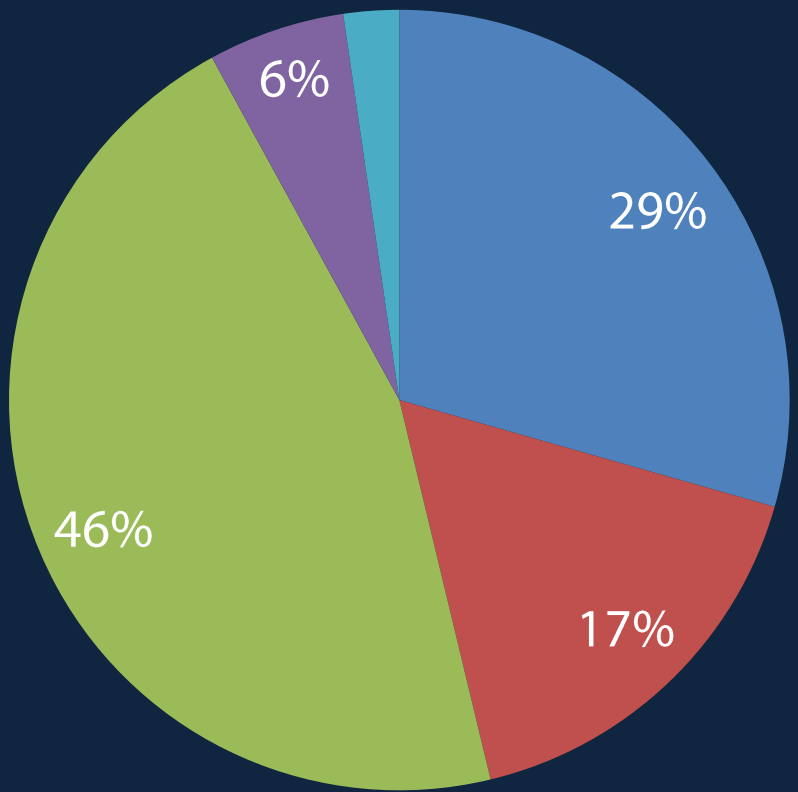
Adults age 18 and over

n = 4,358,833



Youth under Age 18

n = 1,672,341

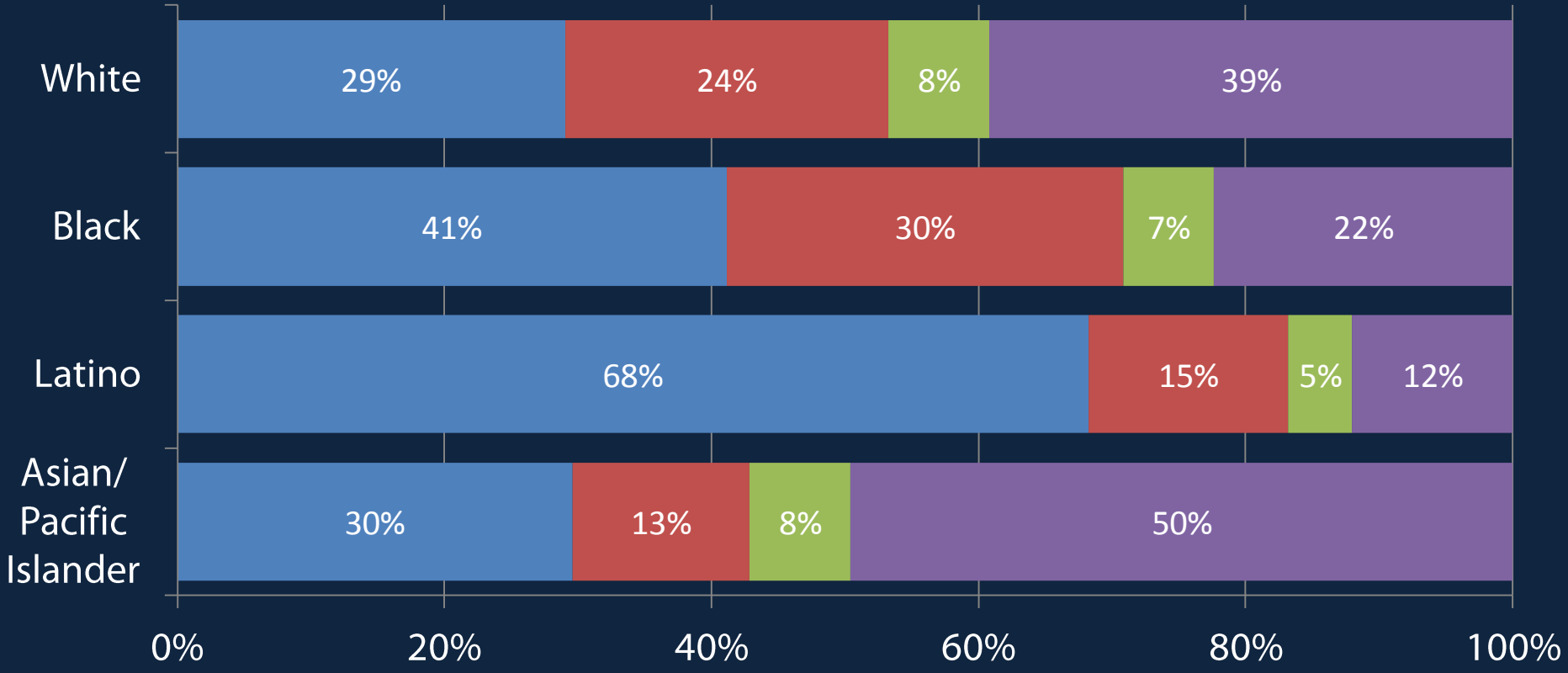


Source: 2011 ACS 1-year estimates microdata, accessed via IPUMS.org

Latinos have the lowest educational levels

Educational attainment for the population 25 and over by race/ethnicity, Houston metro, 2011

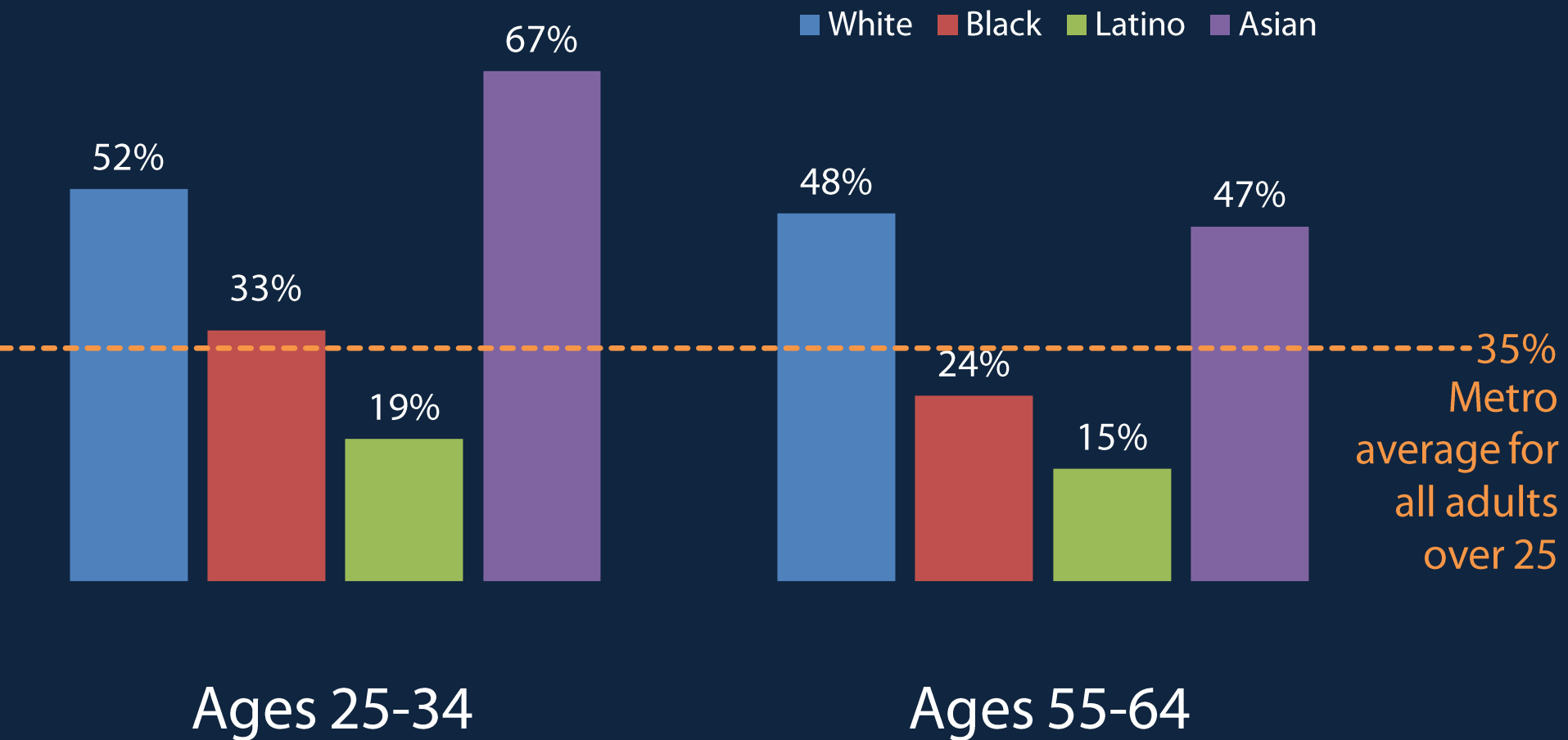
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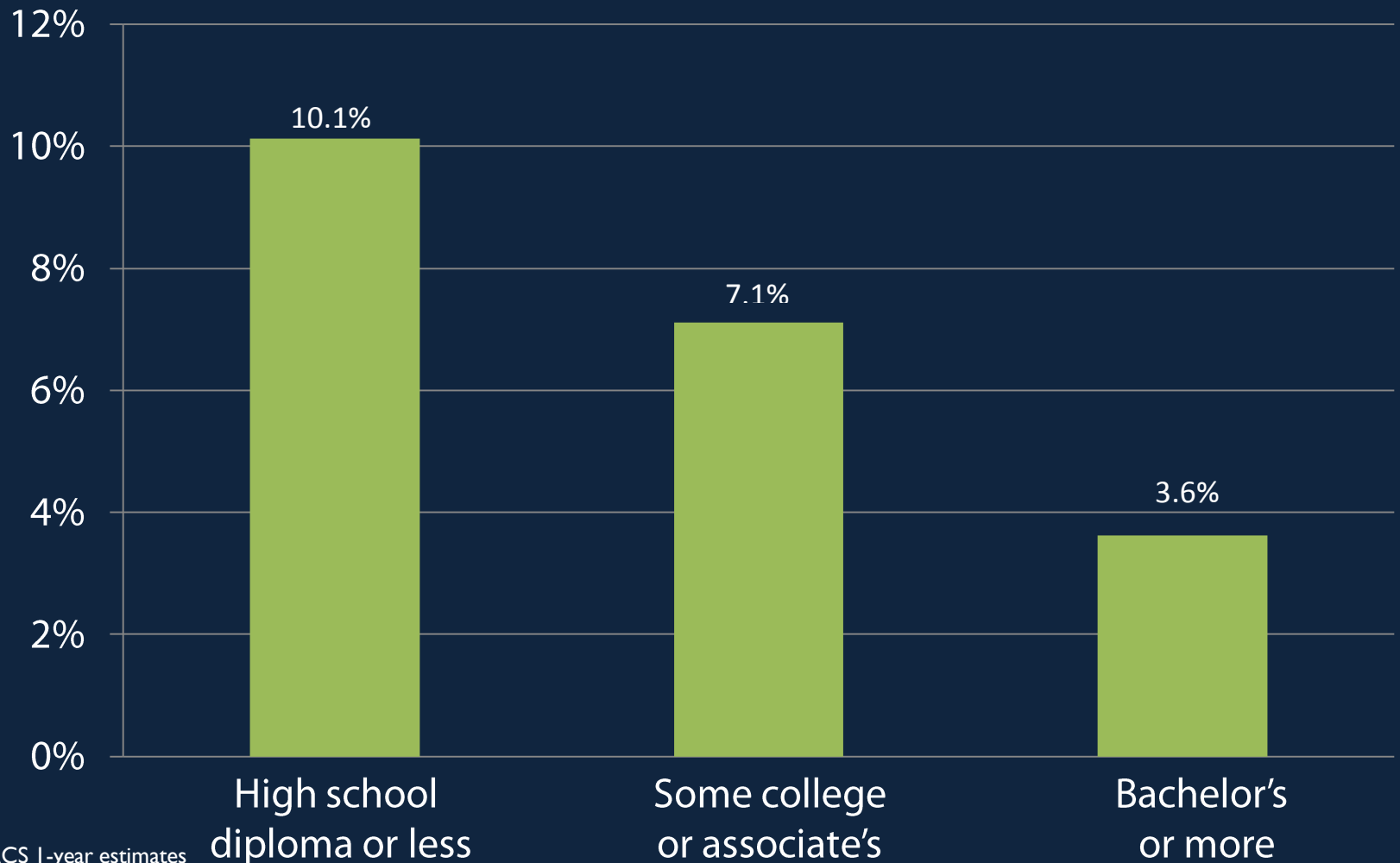
Younger residents of all races/ethnicities have higher educational levels than older residents, but significant racial/ethnic disparities remain

Share of population with an Associate's degree or above, Houston metro, 2011



Higher educated residents are much less likely to be unemployed

Share of civilian population 25-64 unemployed by education attainment, Houston metro, 2011



Workforce Development Action: Considerations to Achieve Near-Term Impacts

Tailored – building on distinct regional industry profiles, demographics, labor markets.

Targeted – focusing to address needs by sectors, responsive to special populations, not all-encompassing.

Business-Led – consistently and methodically engaging the private sector for direction, feedback, and co-delivery.

Integrated / Collaborative – partner across multiple delivery systems, but with common objectives and measures.

visit metro:

www.brookings.edu/metro

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